# Report Cape Cod National Seashore

## ■ 1.0 Site Description

Cape Cod National Seashore, located along outer Cape Cod in Barnstable County, Massachusetts, consists of 43,557 acres of offshore, shoreline and upland landscape features. The park area includes a 40-mile expanse of sandy barrier beach, kettle ponds, and historic structures such as lighthouses and Cape Cod style houses. The Seashore also encompasses six swimming beaches, self-guiding nature trails, and various picnic and overview areas. Lifeguard services are provided at the swimming beaches during the summer season (generally from July through Labor Day) and these beaches represent a major tourist attraction during this period. There are 10 self-guided nature trails within the park, three paved bicycle trails, and four National Register historic structures open to the public. The Seashore operates two Visitor Centers, the Salt Pond Visitor Center off Route 6 in Eastham and the Province Lands Visitor Center off Race Point Road near Provincetown. These Visitor Centers provide orientation movies, exhibits, a bookstore, and information services. Interpretive ranger programs are offered on a daily basis from mid-May to Columbus Day and periodically during the rest of the year. During the summer, as many as 40 different programs are offered, including guided hikes, house tours, and campfire programs. A map of the general area covered by the Seashore is shown in Figure 1.

Park activities include sightseeing, trail and beach walking, swimming, touring of historic houses, fishing, and bicycling. In 1998 approximately 4.8 million visits were counted at the Seashore, making the Seashore one of the 10 most visited units of the NPS. This figure includes 807,843 visits to the Visitor Centers, 67,894 participants at ranger-guided programs, and 2,909,031 beach goers. As many as 5,000 visitors per day utilize the Salt Pond Visitor Center during the summer peak.

The Seashore extends through six separate municipalities, and three of these municipalities operate a total of 10 additional town beaches. Provincetown, at the northernmost tip of the Cape, is the largest population concentration in the summertime adjacent to the Seashore and a major tourist destination in itself. Hotels, motels, and campgrounds are located throughout the Cape area and provide a significant share of the Seashore's visitation. Due to congested highway conditions and driving distance from population centers off of the Cape, most visitation on the Seashore is comprised of residents and visitors who are either summer residents or overnight visitors. The Superintendent indicated that few visits are the result of day trips from off-cape.



Figure 1. Cape Cod National Seashore

## ■ 2.0 Existing ATS

Daily intercity bus service to Cape Cod is provided by the Plymouth and Brockton Street Railway Co. from Boston to both Hyannis (approximately 30 miles southwest of Eastham) and Provincetown. Bonanza Bus Lines provides daily service from New York City to Hyannis. Ferry service is also operated between Boston and Provincetown during the summer. However, the primary means of access to Cape Cod is by private automobile. During the summer peak period, particularly on weekends, traffic conditions can be extremely congested, particularly at the Bourne and Sagamore Bridges, the primary points of access to Cape Cod from the mainland. Traffic conditions along Route 6, the Cape's primary arterial are also frequently congested and occasionally gridlocked (at the Eastham/Wellfleet line) on the way to Provincetown area, potentially impairing the visitor experience to the Cape. However, because these conditions are so well-known and generally anticipated, many visitors and residents have grown to accept these conditions as an unavoidable aspect of the Cape Cod summer experience.

Due to traffic and parking conditions, a beach visitor on a typical summer day will normally visit a single beach area. Traffic and parking are the primary constraints limiting the carrying capacity on the Seashore's beaches. Parking is provided for both the Seashore and the town-operated beaches but is typically congested and filled to capacity at midday on sunny days. Erosion at many of the parking lots is an ongoing problem and requires constant maintenance.

Cape Cod National Seashore has operated a shuttle system from Little Creek inland parking lot (Eastham) to Coast Guard Beach for 12 years, since the original parking lot located at the ocean's edge was lost to a major storm. The Little Creek parking area has 300 to 400 parking spaces and the NPS shuttles approximately 150,000 visitors annually through this service. The Seashore has operated this shuttle with school buses, propane trams and for the last two years, two all-electric trams.

In 1988, Cape Cod National Seashore originally purchased two hybrid electric trams for the shuttle system from Little Creek parking area to Coast Guard Beach. The hybrid electric trams were purchased with NPS and Department of Energy funds. They were designed and constructed by AVS in Chattanooga, Tennessee to carry 60 passengers and have a 60-mile operating range, consisting of a 30-passenger power car and a 30-passenger trailer. However, prior to their completion, the subcontractor building the on-board propane turbine engines backed out of the program, forcing AVS to change the type and design of the trams from hybrid to all electric. This forced a major change in specifications of these trams because the vehicles' wiring, motors and controls were designed for hybrid propulsion, not all-electric. The specified 60-mile operating range, necessary for a full day of shuttle operations over the two-mile route, was reduced to a 13-mile range, requiring the trams to be taken out of service for charging every few hours. Furthermore, since operations with these trams began, operational problems have become commonplace. The NPS is currently in the process of submitting a funding request to purchase two new 30-passenger, 60-mile range hybrid electric power cars to replace the existing all-electric power cars and also to construct a new garage to service and store the vehicles. With the new power cars, the NPS would continue to use the 30-passenger trailers to carry a total of 60 passengers when the demand warrants.

In addition to this shuttle service, the town of Provincetown school district operates a school bus shuttle loop in the downtown area on hourly headways during the summer. This primarily serves visitors who arrive without a vehicle from the ferry. However, the Seashore Superintendent indicated that this service does not operate with sufficient frequency to meet peak season needs.

#### 3.0 ATS Needs

Despite high demand, the NPS does not desire to construct additional parking facilities at the Seashore beaches. Rather than increasing visitation, the NPS wishes to more effectively manage current levels of visitation in cooperation with the Cape Cod towns adjacent to the Seashore. Public transportation is seen as a means of achieving this objective, particularly if service can be implemented between primary lodging and residential areas and the beaches, thereby eliminating the need for additional parking facilities at beaches and reducing use of private vehicles to make the trip. The NPS envisions this as a "personal" service, reflecting the ambience of the Cape. This service would therefore not utilize full-size buses but mini-coaches that would be able to navigate local streets. In addition to a shuttle service to beach areas, the NPS has proposed a shuttle to be operated in Provincetown that would carry visitors without vehicles, primarily those arriving to the town via the ferry, to the Province Lands area particularly Herring Cove Beach area and

eventually to the Province Lands Visitor Center. The NPS has had ongoing discussions with their constituent communities and the Cape Cod Regional Transit Authority about such a service and has developed a draft proposal to obtain funding to purchase vehicles. Quoting from the draft proposal:

"Cape Cod National Seashore is working actively with partners from Town of Provincetown, Town of Truro and the Cape Cod Regional Transit Authority to implement an area shuttle system in the Provincetown, Truro, Province Lands area. The Cape Cod Regional Transit Authority will operate this shuttle system during the summer months. This system is patterned after the one being operated at Acadia National Park in Maine, with small transit buses and vans moving people from their overnight accommodation and public parking lots to downtown Provincetown, North Truro or the National Seashore beaches. This proposal is to obtain funding for the purchase of eight mini-buses, to operate a 20- to 30-minute route throughout the area. We propose that the buses be alternative fuel vehicles, such as propane or hybrid electric.... These buses would be turned over to Cape Cod Transit Authority to contract out or operate themselves for this Province Lands area shuttle service."

The NPS believes that a comprehensive Cape-wide transit system is needed and that this shuttle concept is only part of a larger system that is needed to:

- 1. Provide inter-town service throughout the Route 6 corridor; and
- 2. Facilitate circulation within each individual community.

The NPS has been engaged in an ongoing dialogue with the various constituent communities to reach consensus over various walking, bicycling, and public transportation improvements. However, the Superintendent stresses that each town is different and has different perspectives on the issue. Therefore a consensus has not been achieved at this time.

#### ■ 4.0 Basis of ATS Needs

In support of the proposed area-wide shuttle system, the NPS indicated the following in their draft proposal for capital funding:

"Cape Cod National Seashore gets five million visits a year with the majority from June to September. Provincetown and the Province Lands area are on a very small spit of land on the north end of Cape Cod. Parking and roads are very limited in area, and severe traffic problems are a daily event during the summer months. With this shuttle system visitor and residents alike could leave their car at their overnight accommodations or at home, making a large difference in the amount of traffic in the Province Lands area. Provincetown and the National Seashore in the Province Lands area have a number of parking lots that fill everyday during the summer. With this transportation system the people could leave their cars in these lots and take the shuttle system instead of

getting back in their car and driving to the next Seashore location. There would be less political pressure to add parking, also one of the major problems is that everybody wants to go to the beach on sunny days and to downtown to shop on rainy days, leaving some of the parking lots empty and others full and overflowing. This shuttle system could relieve the pressure on these parking lots during those times.

Cape Cod has a real problem with pollution and ozone depletion because of heavy traffic and pollution from the mid-Atlantic urban areas blowing in to the Cape. By getting people out of their cars, taking cleaner alternative fueled vehicles it will help the pollution and ozone problems and show others that come, visit, and use the shuttle system how good and reliable alternative fueled vehicles are."

### ■ 5.0 Persons Interviewed

Maria Burks, Superintendent, Cape Cod National Seashore

Ben Pearson, Chief of Maintenance, Cape Cod National Seashore

Lauren McKean, Park Planner, Cape Cod National Seashore